Edgewood Area - Aberdeen Proving Ground, Maryland 21010-5424
U.S. Army Soldier and Biological Chemical Command

Environmental and Field Testing Facilities

CAPABILITIES:

Climatic and Harsh Environment Testing

- Thermal shock testing 10 ft x 10 ft x 10 ft; -80 F to 200 °F
- Altitude; blowing rain; sand and dust; salt fog (meet MIL-STD-810E test standards)
- Solar Radiation

Field

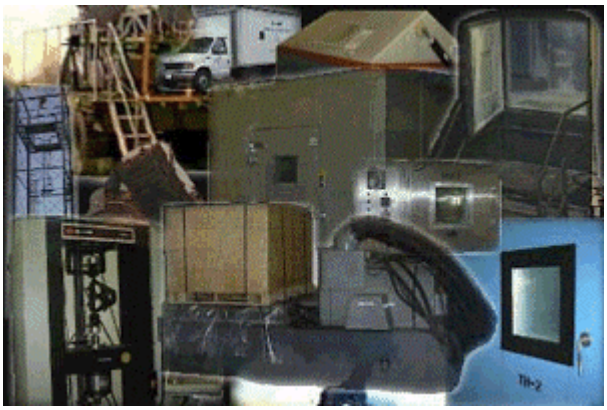
- 300 ft x 300 ft concrete test area
- M Field test area of approx. 400 acres

Rough Handling Test

- 40 ft Drop Tower located at Maxwell Point
- Drop test using helicopter platforms at M Field

Shock Vibration Testing

- Sine; random; random on random; shock; stress screening
- Spectral Dynamics Model 2550 Vibration Controllers.



A wide range of environmental test facilities, equipment, and know-how are available at the Environmental and Field Testing Facilities. The facilities enable one to determine how products will stand up under acceleration, vibration, shock, temperature, humidity, rain, altitude, salt fog, and solar radiation. These valuable resources can assist in the development of new and improved products. Engineers, technicians, and scientists can simulate virtually any environmental stress condition imaginable; and they also have the capability to perform on-line data acquisition and analysis of components being tested.

Tests available at the facilities include: (1) Climatic and Harsh Environment, (2) Data Acquisition and Control, (3) Field, (4) Physical Properties, (5) Rough Handling, and (6) Shock and Vibration. Smoke testing can block optical detection systems. A sand and dust simulation will reveal much about the survivability of products handled by soldiers or civilians alike, as well as the best handling procedures to use, packaging, and transportation. Vibration, shock, and temperature tests can determine whether car and aircraft components, for instance, can withstand pressure and to what degree.

The facilities use state-of-the-art equipment, competitively priced for customers. Products can be put through an entire range of functions while being exposed to a hostile test environment. Instrumentation and data acquisition equipment are used to control the product and to capture data on its performance during environmental stress. This provides customers with invaluable information on how a product will function. Design defects can be identified early, resulting in robust designs and reliable products. Using the Environmental Field and Testing Facilities will result in improved customer satisfaction, reduced business and legal risks, and quick forensic analysis and solutions.

For additional information on this facility, please E-mail engineering.directorate@sbccom.apgea.army.mil.

For information on Technology Transfer applications, please contact us by E-mail (technical.outreach@sbccom.apgea.army.mil) or by fax to 410-436-6529.

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